

Women's Perceived of Mammography in National Center of Early Detection of Breast Cancer at Baghdad Medical City

ادراك النساء لفحص الثدي الشعاعي في المركز الوطني للكشف المبكر لسرطان الثدي في مدينة بغداد الطبية

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الخلاصة

الخلفية: سرطان الثدي من اغلب الأنواع المشخصة شيوعا عموما بين النساء في العالم، على الرغم من أن فحص الثدي الشعاعي يُمكن أن يُقلل من نسبة الوفيات بين النساء من سرطان الثدي، وإدراك النساء لأهمية الفحص الشعاعي يؤثر في اتخاذ القرار لاشتراك المرأة في الفحص الشعاعي. **الهدف:** الأهداف الرئيسية لهذه الدراسة هو تقييم ادراك النساء لفحص الثدي الشعاعي وتحديد مستويات هذه التصورات ، ولإيجاد العلاقات بين ادراك النساء لفحص الثدي الشعاعي وبعض متغيرات الديموغرافية للنساء كالعمر والحالة الزوجية والحالة الاجتماعية-الاقتصادية والتأريخ العائلي لسرطان الثدي ولإيجاد العلاقة بين إدراك النساء لفحص الثدي الشعاعي .

المنهجية: دراسة وصفية تحليلية نُفذت من 1 نيسان 2013 إلى 20 حزيران 2013. اختيرت العينة عمدية (غير احتمالية) من 100 امرأة التي كانت تُحضر العيادة الخارجية في المركز الوطني للكشف المبكر عن السرطان في مدينة الطب وجمعت البيانات من خلال استعمال نموذج استبيان الاعتقادات وعملية الملء الذاتي لكل امرأة كطريقة لجمع البيانات. الإستبانة بنيت وغُذّت لإنجاز أهداف الدراسة، والتي شملت جزأين؛ الجزء الأول يخص المعلومات الديموغرافية للنساء والجزء الثاني يشمل أربعة محاور تتضمن إدراك النساء للمنافع، لكفاءة الذات، للموانع، للخوف. **النتائج:** أشارت نتائج الدراسة بأن أغلب النساء بمستوى العالي من الإدراك لخوف الفحص الشعاعي للثدي. كان هناك علاقات ذات دلالة إحصائية بين إدراك النساء لفحص الثدي الشعاعي والحالة الاجتماعية-الاقتصادية وكان هناك علاقات ذات دلالة إحصائية بين إدراك النساء للمنافع، بالموانع ولكفاءة الذات، وكان هناك علاقات ذات دلالة إحصائية بين إدراك النساء للموانع و إدراك النساء لكفاءة الذات، وأن هناك تأثير إدراك النساء لمخاوف النساء على الموانع.

الاستنتاج : العمل على زيادة الوعي الصحي للنساء للفحص الشعاعي من خلال زيادة الحملات الإعلامية بكل وسائلها ورفع مستوى الوعي للملاكات الصحية كافة لكي يلعبوا دورا فاعلا في وعي المراجعات إلى مراكز فحص الثدي الشعاعي.

التوصيات: يحتاج مقدمي الخدمات الصحية الذين يعملون مع في وحدات فحص تصوير الثدي بالأشعة للنساء إلى تقييم ادراك النساء للفحص بالتصوير من أجل تخطيط وتنفيذ وتقييم برامج التثقيف الصحي النفسي. ويجب تعليم المواطنين عن تعزيز الوعي بسرطان الثدي والتأكيد على مزايه وكيفية متابعته لتشخيص هذا المرض.

الكلمات المفتاحية : إدراك النساء، سرطان الثدي، الفحص الشعاعي لسرطان الثدي.

Abstract

Background: breast cancer is the most commonly diagnosed cancer among women worldwide, although breast screening with Mammography can reduce mortality from breast cancer. Women perceived fear, barriers, benefit, and self-efficacy can affect their decision to participation in Mammography screening.

Objectives: The major objectives of this study were to assess the levels of women's perceived Mammography screening, and to find out the relationships between women's perceived Mammography screening and some women's demographic variables such as age, marital status, socioeconomic status, and family history of breast cancer, to Find out the correlation between entire perceived Mammography variables, and to predict the effect of perceived barriers on fear.

Patients and Methods: A Descriptive analytical study was carried out from April 1, 2013 to June 20, 2013. A purposive (non-probability) sample of 100 women who were attending the outpatient clinic at National Center for Early Detection of Cancer in Medical City. Data was collected through the use of the Health Belief Model HBM scale questionnaire and the process of the self-administrative report for each woman as a method for collections data. The questionnaire was modify to achieve the objectives of the study, which consisted of two parts; the first part is concerned with the demographic characteristics of the women and ; the second part consist of four subscales measure four concepts including perceived benefits, perceived self-efficacy, perceived barrier, and perceived fear

Results: Results of the study indicate that most of the women at high level of perceived fear. There were significant relationships between women's perceived Mammography screening and their socioeconomic status, there were significant relationships between perceived benefits with barriers, self-efficacy, and there were significant relationships between Perceived barriers and self-efficacy, and there were a significant relationship between perceived fears on barriers

Conclusions: work at increase health awareness for women about Mammography screening throughout increase educational programs in all media types and elevate awareness levels for all health providers to play an important roles for women's awareness to attending the Mammography screening centers.

Recommendation: Health providers who work with women in Mammography screening units need to assess women perception of Mammography screening in order to plan, implement, and evaluate psychological health

education programs. And public health education should promote awareness of breast cancer and emphasize the advantages of earlier presentation and diagnosis of this disease.

Keywords: Women Perceived, Breast Cancer, Mammography

INTRODUCTION

Breast cancer is an extremely important issue that threat women health. It has been reported as the highest cause of cancer death amongst women worldwide⁽¹⁾. Screening Mammography is an important tool for detecting breast cancer, therefore benefits of Mammography screening outweigh any risk⁽²⁾. The American Cancer Society recommended yearly regular mammography screening for women aged 40 years or older⁽³⁾.

Mammography testing is effective method of cancer screening, but many women chooses not to be screened because they are afraid to participation in screening mammography, because that means they have breast cancer, so women don't understand how to prevent fear and perceived benefits of mammography⁽⁴⁾.

Breast cancer fear is defined as the "emotional and physiologic response to the threat of breast cancer"⁽⁵⁾. Mammography fear is defined as "the discomfort individuals have or think they would experience in their immediate environment during a mammography screening procedure"⁽⁶⁾.

Despite the volume of research, there are many variables effect women to participation in screening mammography, first demographic characteristics of women, second variables that related to women perception such as perceived benefits, perceived self-efficacy, and the study of these variables can help identify those at risk for a poor screening⁽⁷⁾.

Perceived benefits of mammography are defined as a belief in the effectiveness of the health behavior, having a mammogram, for diminishing the threat of breast cancer⁽⁸⁾.

Self-efficacy is defined as the confidence to have a mammogram and the belief that engaging in this behavior will diminish the threat of breast cancer⁽⁹⁾.

Study has shown that perceived fear can be major barriers to screening mammogram⁽¹⁰⁾, fear linked to mammogram use, perception of threat may lead to few perceived benefits from action and low self-efficacy⁽¹¹⁾. Health providers can play an important role in creating an environment support the screening behaviors and offering positive role through posses appropriate knowledge, attitude and beliefs concerning the health behavior being promoted.

OBJECTIVES OF THE STUDY:

The major objectives of this study were to assess the levels of women's perceived Mammography screening, and to find out the relationships between women's perceived Mammography screening and some women's demographic variables such as age, marital status socioeconomic status, and family history of breast cancer, to Find out the correlation between entire perceived Mammography variables, and to predict the effect of perceived barriers on fear.

METHODOLOGY:

A descriptive analytical study was carried out from April 1, 2013 to June 20, 2013. A purposive (non-probability) sample of 100 women who were attending the outpatient clinic at National Center for Early Detection of Breast Cancer in Medical City. The objectives of this study were to assess the levels of women's perceived Mammography screening, to find out the relationships between women's perceived Mammography screening and some women's demographic variables such as age, marital status socioeconomic status, and family history of breast cancer, to Find out the correlation between entire perceived Mammography variables, and to predict the effect of perceived barriers on fear. Data was collected through the use of the Health Belief Model HBM scale questionnaire and the process of the self-administrative

report for each woman as a method for collections data. The questionnaire was modify to achieve the objectives of the study, which consisted of two parts; the first part is concerned with the socio-demographic characteristics of the women such as age, marital status, and Family history of breast cancer, and socioeconomic status according to WHO classification of socioeconomic include: educational level, occupation, type of family, number of family, residency own or rent, number of room occupied by family, any require home facilities, car and income from their point of view ; the second part consisted of (22) items and composed of four domains measure four concepts including perceived benefits 4 items, perceived self – efficacy 4 items, perceived barrier 6 items, and perceived fear 8 items. All items were rated according to four points-likert scale as [Strongly disagree (SD), disagree (D), agree (A), strongly agree (SA)]. The result of women's perceived Mammography screening was calculated according to the following mean of score (< 1.5) low, (1.5-1.9) Mild, (2- 2.9) moderate, and (3-3.9) high. The validity of the questionnaire was obtained through a panel of experts and the reliability was achieved through the application of alpha Correlation coefficient ($r=76$) which was statistically acceptable. Data was prepared, organized and entered into the computer file, statistical package for social science version (11) was used for analyzing the data. Data was analyzed through the application of the descriptive statistical analysis (frequency, percentage, mean, and mean of score) and inferential statistic (Person's Correlation, simple Liner Regression).

RESULT:

Table 1: Distributions of women by demographic Characteristics

Variables	F	%
1.Age (years)M (34.78), and SD (10.27)	< 20	1
	21-30	23
	31-40	26
	41-50	28
	over 50	22
2.Marital status	Single (not married)	30
	Married	46
	Divorce	11
	Widow	13
3.Socioeconomic status	Low	53
	Milled	29
	High	18
4.Family history of breast cancer	Non	24
	First degree relative	21
	Second degree	55
Total	100	100.0

F= Frequency , % = Percentage, M= Mean, SD=Stander Deviation, Low= (89& less),Milled= (120-90), High -(150-121)

Table (1) describes the demographic characteristics of the women, it shows that the highest percentage (28%) of women at age group (41-50) years, while the lowest percentage (1%) at age group (< 20) years , most of sample (46%) were not married, (53%) at low socioeconomic status. Also the table shows that (55%) had second degree relative of family history of breast cancer.



Figure 1: levels of women perceived Mammography screening

Figure 1: shows that most of the women 58% at high level of perceived fear, while 59%, 58%, 56% respectively were at moderate levels of perceived self-efficacy, perceived barriers, and perceived benefits.

Table 2: Relationship between women's perceived Mammography screening and their Demographic Characteristics

Domains Demographic Characteristics	Un-standardized Coefficients		Standardized Coefficients	t.test	Sig p≤0.05
	B	Std. Error	Beta		
(Constant)	4.530	.385		11.763	0.000 H.S.
Age groups	.029	.046	-0.066	.628	.532
Marital status	.030	.051	0.060	.596	.553
Socioeconomic status	.218	.087	.263	2.489	.004**
Family history of Breast Cancer	-.067	.056	-.115	-1.198	.234
Adjusted R Square: .153 F:3.553 P-Value: .002					

a: Dependent Variable: Perceived Mammography screening

Table (2) revealed that there were significant relationships between women's perceived Mammography screening and their socioeconomic status at $P > 0.005$

Table 3: Pearson Correlations for the variables underlying the present study

Independent Variables		(1)	(2)	(3)	(4)
Perceived benefits (1)	Pearson Correlation Sig. (2-tailed)	1			
Perceived barriers (2)	Pearson Correlation Sig. (2-tailed)	-.267** .007	1		
Perceived self -efficacy (3)	Pearson Correlation Sig. (2-tailed)	.460** .000	-.214* .032	1	
Perceived fear (4)	Pearson Correlation Sig. (2-tailed)	.134 .134	.139 .166	-.123 .222	1
N		100	100	100	100

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table(3)revealed that there were significant relationships between Perceived benefits with barriers, self efficacy, and there were significant relationships between Perceived barriers and self- efficacy at $P > 0.001$.

Table 4: Simple Linear Regression for predicate the effect of perceived fears on barriers

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.489 ^a	.299	.189	.44206	.299	5.744	11	113	.000

Table (4) indicates a significant relationship between perceived fears on barriers at $P > 0.001$.

DISCUSSION

Women engage in Mammography screening, most of them at age group (41-50) years old, married with low socioeconomic status 55%, and had second degree of relative breast cancer. this findings agree with⁽¹²⁾ who study 142 women 40 years old and older, the majority of them married 81.7% ,and had second degree of relative breast cancer. ⁽¹³⁾ reported that 122 (88.4) of 230 women were married, fifty percent of the women were aged between 40 and 50 years, majority of them was married, and about half of them regarded their socioeconomic status as inadequate.

Participant will include women who are 40 years old and older (in concordance with American cancer society recommended being age for annual screening of asymptomatic women⁽¹⁴⁾).

Socioeconomic status affects Mammography screening utilization, poor women are significant less likely to get Mammography screening⁽¹⁵⁾. ⁽¹⁶⁾ reported that their socioeconomic status for example higher income and higher level of education are important correlate of use for fear.

Women at higher familial risk are adhering more often to cancer screening recommendation than women at lower familial risk ⁽¹⁷⁾.

As shown in figure (1) women experience high level of perceived fears. This finding agree with who reported that prospective odds of obtaining Mammography 70%, less among women with high level of fear. The researcher suggest that the highly level of women fear may be due to fear from pain associated with fear, fear from radiation, and fear from procedure will prove embarrassing seem likely to deter screening.

The relationship between women perceived Mammography screening domains (perceived benefits, perceived self – efficacy, perceived barrier, and perceived fear), simultaneous entry of variables. Findings indicated that there were significant correlation of perceived benefits with perceived barrier, perceived self – efficacy, and there were significant correlation of perceived barrier with perceived self – efficacy, women with increased benefits were decreased barriers and increase self – efficacy as shown in table (3). This findings agree with the result of Victoria et al. who found that perceived benefits correlated with perceived self – efficacy ($r=0.41$, $p<.001$). The researcher suggest that still a need for raising awareness in relation to breast cancer and the role of Mammography screening to attend relatively easily⁽¹⁶⁾.

The predictor of perceived fear that significantly effect on perceived barrier (table 4). the result indicated that there were significant correlation of perceived fear and perceived barrier ($r=.489$, $p<.001$), increased fear decreased barriers, this result is agree with result of Nicholas et al. who found that greater fears of cancer was associated with lower likelihood, frequency of screening⁽¹⁷⁾. Victoria et al. found that there were significant relationship of perceived fear

and perceived barrier ($P=.018$, $p<.001$)⁽¹⁶⁾. women with sever worry appeared to be barrier to Mammography screening take-up⁽¹³⁾.

Aydin ⁽¹⁸⁾ reported that fear, worries are major barriers to Mammography screening, while Kim and Kim mentioned that lack of fear is a larger barriers to Mammography screening⁽¹²⁾.

The researcher suggests that women fears to participate in Mammography screening because it means they have it especially if breast cancer runs in their families.

CONCLUSIONS

The study concludes that women had higher level of fear and moderate levels of perceived benefits, perceived barrier, perceived self – efficacy, and there were significant relationships between socioeconomic status and perceived Mammography screening. Women with increased benefits were decreased barriers and increase self – efficacy, Women with increased fear lead to decreased barriers.

RECOMMENDATIONS:

According to the findings of the present study, the researcher recommends the following:

1. Health providers who work with women in Mammography screening units need to assess women perception of Mammography screening in order to plan, implement, and evaluate psychological health education programs
2. Health providers need to invite women to screening and educate women regarding the important of mammography for early detection.
3. Health providers need to be aware of the barriers that preventing women from attending mammography screening and provide women with information and advice in a sensitive way so women can make informed cessions regarding breast mammography screening
4. Public health education should promote awareness of breast cancer and emphasize the advantages of earlier presentation and diagnosis of this disease.

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